Professional and Managerial Branch Miscellaneous Professional Group Horticulture Series HORTICULTURIST

12/93

## Summary

Under general supervision, plan, supervise, perform research and participate in the operation of the Zoo's greenhouse, grounds and related operations.

## Typical Duties

Direct the procurement, propagation, planting and care of seeds, plants and landscaping for the beautification of city zoo exhibits and grounds. Involves: operating and maintaining a commercial size greenhouse; developing and revising plant nutrient and environmental control specifications; scheduling planting; selecting materials according to kind of plant, preparing planting materials list and ensuring that materials are on hand during planting; mixing growth media and preparing containers.

Plan and design planting arrangements. Involves: ascertaining type and number of species to propagate; determining amount and types of ground cover, ornamental plants, shrubs, and trees for zoo exhibits and grounds;

Conduct horticultural research. Involves: reviewing pertinent agricultural literature; selecting, developing or modifying existing methods, techniques and procedures for growing domestic and exotic plants for zoo exhibits and grounds; determining appropriate plants for zoo exhibits by geographic areas and for animal compatibility; developing a model exhibit demonstrating native and drought tolerant plants; maintaining other demonstration plantings.

Oversee and participate in the installation and maintenance of irrigation and landscaping of zoo grounds, parking lot, buildings and exhibits. Involves: installing trees, shrubs, planters, flower beds and watering systems; repairing and maintaining irrigation systems in planters and on zoo grounds; fertilizing and treating plants, trees, and shrubs for insects; ensuring that the lawn is trimmed and trees and shrubs are pruned; applying nutrients, herbicides, pesticides and fungicides; operating gardening and landscaping equipment; coordinating with animal care staff regarding placement, repair and replacement of plants in zoo animal enclosures; ensuring that plants, fertilizers and insecticides do not present hazards to public, zoo personnel or animals.

Supervise, train and evaluate subordinate personnel. Involves: assigning and reviewing work; explaining and demonstrating greenhouse and grounds care techniques; enforcing personnel rules and regulations; standards of conduct, work attendance and safe working practices.

Performs administrative, public education and miscellaneous duties. Involves: speaking to garden clubs, research cooperative programs and other interested groups concerning xeriscaping and other topics; writing reports; estimating budgetary needs for area of responsibility; coordinating materials acquisition with purchasing department; performing related professional and agricultural duties as required.

## MINIMUM QUALIFICATIONS:

<u>Training and Experience</u>: Graduation from a recognized college or university with a Bachelor of Science in Agriculture with a major in Agronomy or Horticulture Science or closely related discipline where the focus of the curriculum deals with multiple species and broad categories of flora propagation, management and related research and four years of professional plant propagation and maintenance of a wide variety of plants including trees and shrubs; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of: propagation, planting, pruning and treatment techniques for plants, trees and shrubs; operation of commercial greenhouse. Good knowledge of: horticultural investigation and research techniques; insects, parasites and diseases that attack plants, shrubs and trees; proper use of hazardous chemicals, insecticides, and fertilizers; xeriscaping and native plants; water conservation techniques; landscaping concepts and poisonous plants. Some knowledge of environmental control structures, systems and techniques.

Ability to: operate a commercial size greenhouse; train and supervise employees engaged in the propagation and care

of plants, shrubs and trees and in the installation and maintenance of landscaping projects; install and repair sprinkler systems and components such as sprinkler head and PVC; establish and maintain effective working relationships with employees, officials and the general public; design and arrange general and exhibit plantings; conduct public education programs; develop, implement and maintain xeriscape and water conservation projects.

Skill in use of: horticultural laboratory and greenhouse equipment, gardening tools and equipment, insecticide and plant food application equipment.

Special Requirements: May be required to work after normal working hours, during weekends and holidays and is subject to emergency recall or consultation for all shifts.

*Physical Requirement:* Work outside on unpaved surfaces and inside of zoo exhibits and around zoo animals to install, remove, observe and care for zoo flora; move heavy objects up to 50 pounds such as small trees and soil; stoop, bend and climb ladders to inspect, prune and treat plants, shrubs, and trees.

*Licenses:* Class C Texas Drivers license or an equivalent license issued by another state; must obtain a Texas Pesticide Applicators License within six months of employment.

Director of Personnel	Department Head

